



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/720,057

11/25/2003

Sven Bernhard

11884/408001

4191

53000

7590

10/17/2008

KENYON & KENYON LLP
1500 K STREET N.W.
WASHINGTON, DC 20005

EXAMINER

HOANG, PHUONG N

ART UNIT

PAPER NUMBER

2194

MAIL DATE

DELIVERY MODE

10/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/720,057	Applicant(s) BERNHARD ET AL.	
	Examiner PHUONG N. HOANG	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 14, 16 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 14, 16 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to amendment filed 6/20/3008.

Claims 1 – 14 and 16 – 20 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 5 and 7 – 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dinallo, US patent no. 5,727,212.**

4. **As to claim 1**, Dinallo teaches a method comprising:

providing an interface (OO generic devices interface, abstract, figures 2 and 6) to access a plurality of devices (devices) the interface being independent of specific

features of the peripheral devices, the interface having a plurality of generic routines (procedural calls, figure 2 and associated text) commonly shared by the peripheral devices (peripheral devices, col. 3 lines 35 - 50);

upon receipt of a request for a feature (request, col. 5 lines 2 – 25), calling the generic routines as a function of features (functions, methods, and procedure calls, figure 2 and associated text, col. 5 lines 5 – 25);

identifying a peripheral device capable of performing a specific feature corresponding to the feature requested (selected device driver, abstract) executing a native driver of the identified peripheral devices; and performing on the identified peripheral device the specific feature corresponding to the feature requested using the executed native driver (abstract, col. 4 – col. 5 lines 25).

5. **As to claims 2 - 3**, Dinallo teaches wherein the providing an interface includes: providing a plurality of parameters (col. 3 lines 35 - 50).

6. **As to claim 4**, Dinallo teaches upon the execution of the driver, accessing the requested peripheral device (col. 5).

7. **As to claim 5**, Dinallo teaches upon receipt of another request, using the interface to call the generic routines as a function of specific features of another requested one of the peripheral devices (col. 5 lines 5 - 25).

8. **As to claim 7**, Dinallo teaches wherein the request is a request from an application to connect to the requested peripheral device (col. 3 lines 35 - 50).

9. **As to claim 8**, Dinallo teaches wherein the request is a request from an application to disconnect from the requested peripheral device (col. 5 lines 40 - 65).

10. **As to claim 9**, see rejection for claim 7 above.

11. **Claims 14 and 16 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Edmonds, US pub. no. 2003/0231329.**

12. Edmonds reference was cited in previous office action.

13. **As to claim 14**, Edmonds teaches a system comprising:

at least one peripheral device (printer, 0007) having associated therewith a native driver (printer driver, 0007 - 0011); and

a mobile computer (laptop, 0007) configured to provide an interface (generic driver interface, 0007 - 0011) used by an application to access the at least one peripheral device, use the interface to call a plurality of routines (the printer driver is capable of controlling select that printer, 0015, 0024) as a function of a request for a feature, the generic routines cause the native driver (printer driver installed on the laptop computer, 0007), installed on the computer driver to execute and control the peripheral device (control the printers, 0007 – 0011, 0015, 0022), the interface being independent of device-specific features of the at least one peripheral device.

14. **As to claims 16 - 17**, Edmonds teaches wherein the mobile computer is further configured, upon receiving a request from the peripheral device to provide data to the application (0009).

15. **As to claim 18**, Edmonds teaches wherein the computer is further configured, upon receiving a request to access the at least one peripheral device, to use the interface to call a plurality of routines as a function of the device-specific features of the at least one peripheral device, and upon receiving a request to access a second peripheral device (the second of various printers, 0015), to use the interface to call the

Art Unit: 2194

plurality of routines as a function of the device-specific features of the second peripheral device.

16. **As to claim 19**, Edmonds teaches a second mobile computer (a second of mobile professionals, 0004), having the application ported thereto, configured to access a different peripheral device (printers) with the application, wherein the application on the second mobile computer uses the interface to access the different peripheral device without modifying the application.

17. **As to claim 20**, Edmonds teaches wherein the mobile computer uses the interface (figure 2 and associated text) to limit communication with the at least one peripheral device to one request at a time.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2194

19. Claims 6, 11, 12 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinallo, US patent no. 5,727,212 in view of Edmonds, US pub. no. 2003/0231329.

20. As to claim 6, Dinallo does not explicitly teach the peripheral device are printer.

Edmonds teaches one or more of the peripheral devices are printers (printers, 0007).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Dinallo and Edmonds because Edmonds's printers would provide more choices of peripheral devices to the system and the printer is a need for any computer system.

21. As to claim 11, Edmonds teaches providing a graphical user display (figure 2 and associated text) to allow a user to select the peripheral devices to be accessible by the interface; and providing native drivers corresponding to the selected peripheral devices.

22. As to claim 12, Dinallo teaches a method comprising:

A connection class including generic routines to connect to peripheral devices (DDInterface class is a base class, title, abstract, figure 3 and associated text, col. 4) the generic routines being independent of device-specific features of the peripheral devices (abstract interface maintain device independence, figures 2 and 6 and associated text)

receiving a request to access one of the peripheral devices (request, col. 5 lines 25);

Dinallo does not explicitly teach the steps of determining whether the requested peripheral device is accessible; if the request is a request to connect a computer to the requested peripheral device, cause requested peripheral device to execute; if the request is a request from the requested peripheral device to send data to the computer, notifying the computer that the requested peripheral device has the data, and sending the data from the requested peripheral device to the computer.

Edmonds teaches

determining whether the requested peripheral device is accessible (responds to user's input, broadcast printer's identification information ... printer, 0009);

if the request is a request to connect a computer to the requested peripheral device, cause requested peripheral device to execute (the printer driver receives the user-selected printer, the user's print job is directed to that printer, 0007, 0009, 0015, 0022);

if the request is a request from the requested peripheral device to send data to the computer, notifying the computer that the requested peripheral device has the data, and sending the data from the requested peripheral device to the computer (when the print job is completed, the printer sends a message user's PC, 0021).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Dinallo and Edmonds because Edmonds's determining the accessible peripheral device would allow user to make physical connection to the desired peripheral device such as printer as need (0009).

23. **As to claim 13**, Edmonds disconnecting the computer from the requested peripheral device when there is no printing request needed (closeprinter, page 9).

24. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dinallo, US patent no. 5,727,212 in view of Dorris, US patent no. 5,867,710.**

25. Dorris reference was cited in previous office action.

26. **As to claim 10**, Dinallo does not explicitly teach the step of providing an emulator to simulate access to the peripheral devices in order to test the interface.

Dorris teaches providing an emulator to simulate access to the peripheral devices in order to test the interface (HAL test, title, abstract, col. 1, figures 3 and 4 and associated text).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Dinallo and Dorris's system because the test would make sure the devices would properly operate with the interface (col. 2 lines 20 – 35).

Response to Arguments

27. Applicant's arguments, regarding to claims 1 – 13, have been considered but are moot in view of the new ground(s) of rejection; regarding to claims 14, 15 – 20 have been fully considered but not persuasive.

28. Applicant argued in substance that Edmonds does not teach “using an interface to callperipheral device”.

29. Examiner respectfully disagreed with applicant's remark. Claim 14 is broader than claim 1. Examiner only needs to have one native driver for at least one peripheral device as claimed. Edmonds's printer driver is the native driver of a peripheral device.

Art Unit: 2194

The printer driver includes an interface that is generic driver. A plurality of routines included in printer-independent PDL (0016).

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONG N. HOANG whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

Art Unit: 2194

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng A. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. N. H./
Examiner, Art Unit 2194

/VAN H NGUYEN/
Primary Examiner, Art Unit 2194